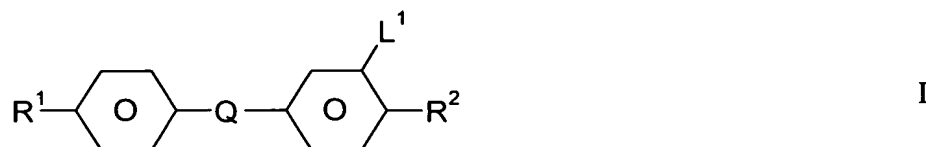


This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) Polymerizable, luminescent compounds of formula I



wherein

$R^1, R^2$  are independently of each other H, halogen,  $NO_2$ , CN, NCS, straight chain, branched or cyclic alkyl with 1 to 25 C-atoms wherein one or more  $CH_2$  groups may also be replaced by  $-CO-$ ,  $-O-$ ,  $-S-$ ,  $-NR^0-$ ,  $-CH=CH-$ ,  $-C\equiv C-$  in such a manner that O- and/or S-atoms are not linked directly to one another, and wherein one or more H-atoms may also be replaced by F or Cl, or denotes  $P-(Sp-X)_n-$ ,

Sp is a spacer group with 1 to 20 C-atoms,

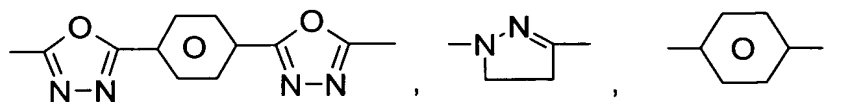
P is a polymerizable group,

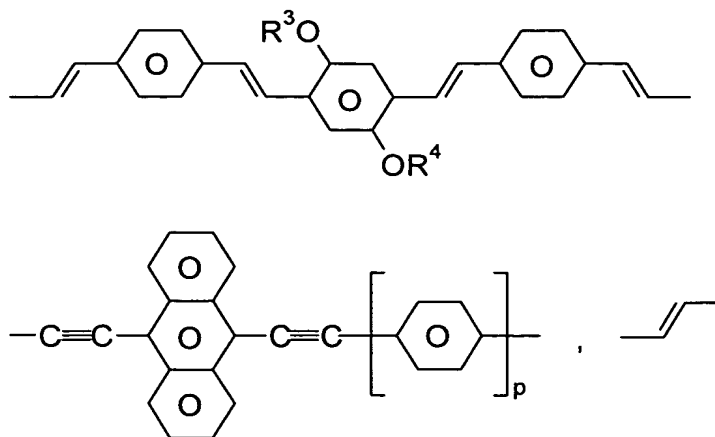
X is  $-O-$ ,  $-S-$ ,  $-CO-$ ,  $-COO-$ ,  $-OCO-$ ,  $-CO-NR^0-$ ,  $-NR^0-CO-$ ,  $-NR^0-$  or a single bond,

n is 0 or 1,

$R^0$  is H or alkyl with 1 to 5 C-atoms,

Q is one of the following subformulae





$\text{R}^3, \text{R}^4$  are independently of each other straight chain, branched or cyclic alkyl with 1 to 15 C-atoms wherein one or more H-atoms may also be replaced by F or Cl, or denotes  $\text{P}-(\text{Sp-X})_n$ ,

$p$  is 0 or 1,

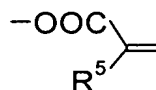
$\text{L}^1$  is H, F or CN

with the proviso that

a) the compounds of formula I contain one, two or more groups  $-(\text{X-Sp})_n\text{-P}$ ,

b) if Q denotes  $\text{---C}_6\text{H}_4\text{---}$ , then  $\text{R}^1$  is  $-\text{O-Sp-P}$ ,

$\text{R}^2$  is  $-\text{CN}$ , wherein P is not

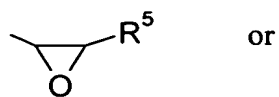


with  $\text{R}^5$  denoting H, Cl or alkyl with 1 to 5 C-atoms,

c) if Q denotes  $\text{---CH=CH---}$ , then  $\text{R}^1$  is  $-\text{N}(\text{Sp-P})(\text{R}^3)-$  and

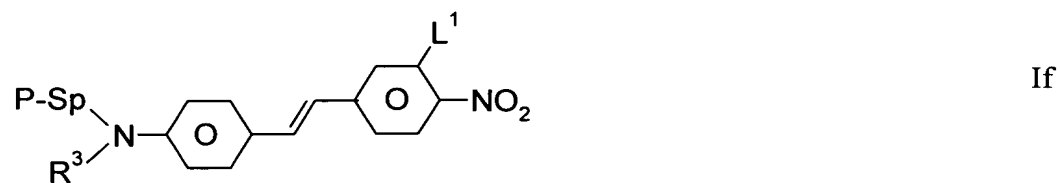
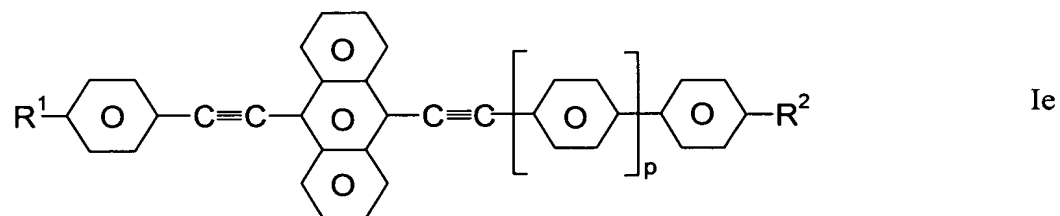
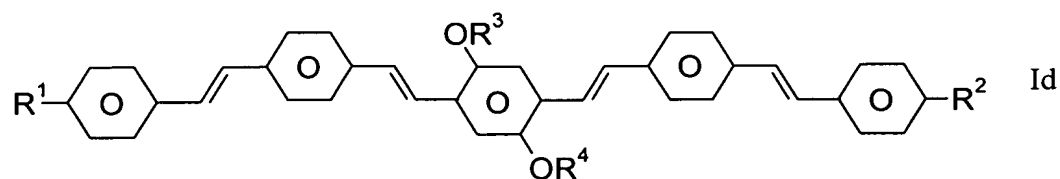
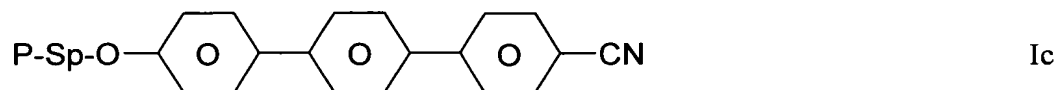
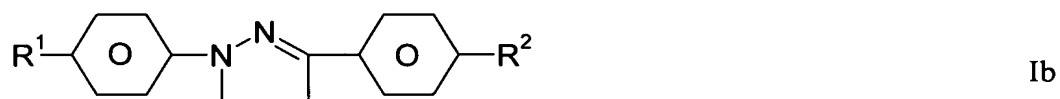
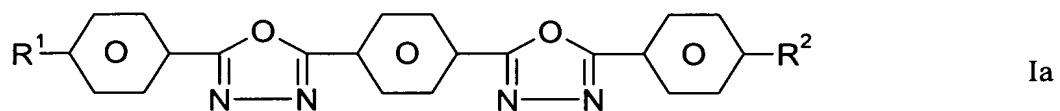
$\text{R}^2$  is  $-\text{NO}_2$

i) wherein P is not  $\text{—OOC—C(R}^5\text{)=}$  and P is not



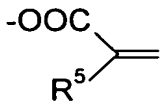
ii)  $\text{L}^1$  is F or CN.

2. (Original) Compounds according to claim 1 selected from the following formulae

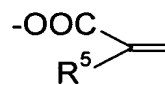
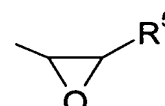


wherein

$R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ , P, Sp,  $L^1$  and p are defined as in claim 1 with the proviso that

a) in formula Ic P is not  wherein  $R^5$  denotes  
H, Cl or alkyl with 1 to 5 C-atoms,

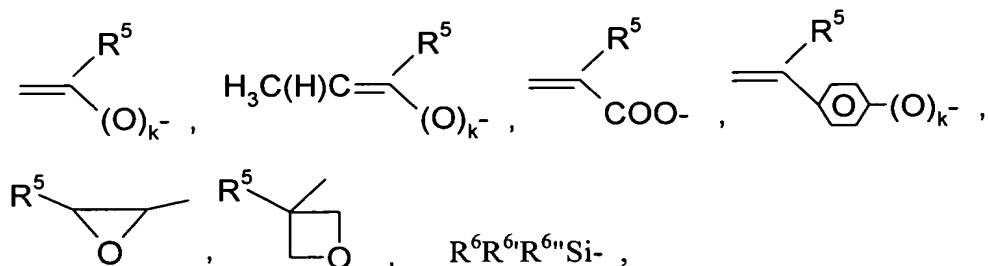
b) in formula If

i) P is not  and P is not 

wherein  $R^5$  has the meaning given above or

ii)  $L^1$  is F or CN.

3. (Currently Amended) Compounds according to claim 1 or 2 wherein P is selected from



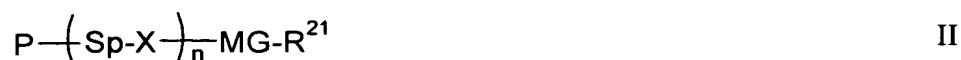
wherein

$R^5$  is H, Cl or alkyl with 1 to 5 C-atoms,

$R^6, R^{6'}, R^{6''}$  are independently of each other -Cl, -O-alkyl and/or -O-CO-alkyl with alkyl having 1 to 5 C-atoms and

k is 0 or 1.

4. (Currently Amended) Polymerizable mixture comprising at least one compound according to ~~one of the claims 1 to 3~~ Claim 1.
5. (Original) Polymerizable mixture according to claim 4 further comprising at least one polymerizable mesogenic compound of formula II



wherein

P is a polymerizable group,

Sp is a spacer group having 1 to 20 C-atoms,

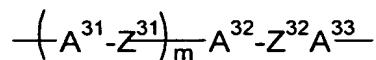
X is a group selected from -O-, -S-, -CO-, -COO-, -OCO-, -O-COO-, -SO<sub>2</sub>-O-, -O-SO<sub>2</sub>- or a single bond,

n is 0 or 1,

R<sup>21</sup> is H or an alkyl radical with up to 25 C atoms which may be unsubstituted, mono- or polysubstituted by halogen or CN, it being also possible for one or more non-adjacent CH<sub>2</sub> groups to be replaced, in each case independently from one another, by -O-, -S-, -NH-, -N(CH<sub>3</sub>)-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S- or -C≡C- in such a manner that oxygen atoms are not linked directly to one another, or alternatively R<sup>21</sup> is halogen, cyano or has independently one of the meanings given for P-(Sp-X)<sub>n</sub>,

MG is a mesogenic or mesogeneity supporting group.

6. (Original) Polymerizable mixture according to claim 5 wherein MG is a mesogenic or mesogeneity supporting group of formula III



III

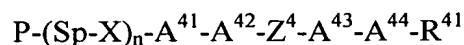
wherein

$A^{31}$ ,  $A^{32}$ ,  $A^{33}$  being independently from one another 1,4-phenylene in which, in addition, one or more CH groups may be replaced by N, 1,4-cyclohexylene in which, in addition, one or two non-adjacent  $CH_2$  groups may be replaced by O and/or S, 1,4-cyclohexenylene or naphthalene-2,6-diyl, it being possible for all these groups to be unsubstituted, mono- or polysubstituted with halogen, cyano or nitro groups or alkyl, alkoxy or alkanoyl groups having 1 to 7 C atoms wherein one or more H atoms may be substituted by F or Cl,

$Z^{31}$ ,  $Z^{32}$  being independently from one another -O-, -CO-, -COO-, -OCO-, -SO<sub>2</sub>-O-, -O-SO<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -OCH<sub>2</sub>-, -CH<sub>2</sub>O-, -CH=CH-, -C≡C-, -CH=CH-COO-, -OCO-CH=CH- or a single bond and

m being 0, 1 or 2.

7. (Currently Amended) Polymerizable mixture according to ~~claim 4, 5 or 6~~ Claim 4 further comprising at least one polymerizable and photoorientable compound.
8. (Original) Polymerizable mixture according to claim 7 characterized in that the polymerizable and photoorientable compound is denoted by the formula IV



IV

wherein

P is a polymerizable group,

Sp is a spacer group having 1 to 20 C-atoms,

- X is a group selected from -O-, -S-, -CO-, -COO-, -OCO-, -O-COO-, -SO<sub>2</sub>-O-, -O-SO<sub>2</sub>- or a single bond,
- n is 0 or 1,
- A<sup>41</sup>, A<sup>42</sup>,  
A<sup>43</sup>, A<sup>44</sup> are independently of each other 1,4-phenylene, wherein 1, 2, 3 or 4 H-atoms may be replaced by F or Cl,
- A<sup>41</sup>, A<sup>44</sup> may in addition to the above given meaning denote independently of each other a single bond,
- Z<sup>4</sup> is -N=N-, -CH=CH- or  $\left( \text{O} \right)_{s1} \left( \text{CH}_2 \right)_{s2} \text{O-CO-CH=CH-}$  with s1 being 0 or 1 and s2 being 0 to 6,
- R<sup>41</sup> is H, halogen, NO<sub>2</sub>, CN, SCN, straight chain, branched or cyclic alkyl with 1 to 25 C-atoms wherein one or more CH<sub>2</sub> groups can also be replaced by -O-, -S-, -NR<sup>0</sup>-, -CH=CH-, -C≡C- in such a manner that O- and/or S-atoms are not linked directly to one another, and wherein one or more H-atoms can also be replaced by F or Cl, or denotes P-(Sp-X)<sub>n</sub>.

9. (Currently Amended) Polymer material obtainable by polymerizing a polymerizable mixture according to ~~one of the claims 4 to 8~~ Claim 4.
10. (Original) Polymer material according to claim 9 obtainable by a process comprising the following steps
  - a) forming a thin layer of the polymerizable material,
  - b) aligning the molecules of the compounds of the mixture in the thin layer into a uniform orientation or a patterned orientation such that in each pattern the orientation is uniform,
  - c) polymerizing said polymerizable material.

11. (Currently Amended) Use of a compound according to ~~one of the claims 1 to 3~~  
Claim 1 ~~or of a polymerizable mixture according to one of the claims 4 to 8~~ for  
the manufacture of photoluminescent and/or electroluminescent polymer  
material.
12. (Currently Amended) Use of a polymer material according to claim 9 ~~or 10~~ as  
a photo- and/or electroluminescent material in a light emitting device, an  
optical or electrooptical display element.
13. (Currently Amended) Light emitting device comprising a polymer material  
according to claim 9 ~~or 10~~ as a photo- and/or electroluminescent material.
14. (Currently Amended) Optical or electrooptical display element comprising a  
polymer material according to claim 9 ~~or 10~~ as a photo- and/or electro-  
luminescent material.
15. (New) Use of a polymerizable mixture according to Claim 4 for the manufacture  
of photoluminescent and/or electroluminescent polymer material.